

always interesting and instructive, and I therefore give the localities of the specimens and dates of capture so far as they exist on the pin labels.

*Calanus*. Nashville, Tenn., vi, 8; Beulah, Manitoba, vii, 16; vii, 28; Ohio; Runnels Co., Tex., v, 10; Wilmington, N. C., vi, 5; Philadelphia, Pa., vi, 10; viii, 24; Lake George, Fla.; Colorado; Newark, N. J., vii, 4; Elmwood, R. I., viii, 8; Jacksonville, Fla., v, 5; Atlanta, Ga.; Toronto, Ont., vi, 20; vii, 9; Beulah, New Mex., vii, 16.

*Edwardsi*. Minneapolis, Minn., vii, 8; Iowa; Toronto, Ont., vii, 9; vii, 23; Platte Canyon, Colo., vi, 23; Canadensis, Pike Co., Pa., viii, 12; London, Ont.; Chicago, Ill., vi, 4; Round Mountain, Blanco Co., Tex., v, 17. The distribution does not show anything conclusive. Among the lot sent by Dr. Fletcher are dark specimens taken at Toronto by Arthur Gibson on same dates as light ones. Moreover, most of the Canadian specimens are somewhat old and flown, and would therefore be lighter in color. The specimens exhibit the usual variation in size found in all butterflies. My conclusions are that under the names *calanus* and *edwardsi* we have but one species. My division into dark specimens (*calanus*) and light specimens (*edwardsi*) was for purposes of study. For sake of brevity I have not gone into the general synonymy of the names treated.

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### Notes on American Hemiptera.

By E. BERGROTH, M.D., Duluth, Minn.

#### III.—The Acanthosomatinae of North America.\*

In his "Check-list" (1886) Uhler enumerates five North American species of this subfamily. By placing three of them as synonyms Van Duzee has reduced this number to two in his "Annotated List of the Pentatomidæ Recorded from America North of Mexico" (1904), but he describes one new species and one new variety. All the North American species are placed in the genus *Acanthosoma* by these authors. Since my moving over to this side of the Atlantic, I have had occasion to examine most of the American forms of this group, and find

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\* Nos. I. and II. have been published in the Canadian Entomologist.

that the genus *Acanthosoma* does not occur in America at all, the species referred to this genus by the American authors belonging to other genera. That they have not hitherto been correctly located may partly be due to the circumstance that the palearctic genera of this subfamily have been badly mixed up in the catalogue of Lethierry and Severin. By aid of the following characters our species are easily located :

*Acanthosoma* Curt.—Mesosternal lamina not prolonged backward. Mesosternum at the base behind the lamina a little elevated; the elevated part longitudinally excavated or sulcated (Old World genus).

*Elasmotethus* Fieb., Stal.—Mesosternal lamina prolonged backward between or behind the middle coxæ. Posterior lateral margins of the pronotum neither depressed nor amplified. Posterior angles of pronotum obtuse, not projecting backwards. Orificia long, about three times as long as the distance between their apex and the anterior angle of the metasternum.

To this genus belong (1) *cruciatius* Say, (2) *atricornis* V. Duz., (3) *cooleyi* V. Duz., which I have not seen. It is described as a variety of *cruciatius*, but, judging from the description, I think there can be no doubt that it is a different species.

*Elasmucha* Stal (*Clinocoris* Hahn).—Mesosternal lamina as in *Elasmotethus*. Posterior lateral margins of the pronotum depressed and amplified. Posterior angles of pronotum angularly projecting backwards. Orificia rather short, less than twice as long as the distance between their apex and the anterior angle of the metasternum.

To this genus belongs (4) *lateralis* Say. The name *Clinocoris* cannot be accepted for this genus, being pre-occupied by Fallén for the bedbug.

According to Distant, *A picicolor* Westw., described from an unknown locality, is a synonym of *lateralis* Say; but Horváth, who has also examined Westwood's type, says that it is the same species as the palearctic *fieberi* Jak. Both these authors may be right, for it is not impossible that *fieberi* will prove to be identical with the nearctic *lateralis*. I have no specimen of *fieberi* here for comparison, and must leave this question unsettled. Distant has described an *Acanthosoma flammata*

from Mexico. From the quite inadequate description it is impossible to say to what genus it belongs, but it is very unlikely that it is an *Acanthosoma*.

IV.—On Two Reduviidæ from British Guiana.

**Repipta spinosa** Fabr.

Mr. Van Duzee has communicated to me specimens of this (or a very closely allied) species. In describing the types in his "Hemiptera Fabriciana" Stal placed *Zelus spinosus* Fabr. and *sexdens* Fabr. in the genus *Repipta* Stal, but later, when the types were not before him, he removed them to the genus *Corcia* Stal, apparently with some hesitation. They are, however, much better placed in *Repipta*.

**Diaditus pilosicornis** n. sp.

Testaceous, membrane and inner part of corium pale grayish; the ocelliferous tubercle, the rostrum, two median pronotal vittæ coalescing on the anterior lobe; a sublateral basal streak to scutellum; an abbreviated claval streak; a streak near the inner apical angle of the corium and a shorter outer streak in front of the discoidal cell; two somewhat obscure longitudinal fasciæ to the meso- and metapleura; two elongate spots, the posterior of which is shorter, to the lateral margins of the abdominal segments, and a sublateral ventral vitta, fuscous; a large triangular posteriorly sinuated spot on the discoidal cell; an irregular abbreviated basal streak on the inner basal cell of the membrane; a small basal spot and a broad vitta, sinuated anteriorly and strongly narrowing posteriorly, on the outer basal cell of the membrane, very close to the external margin, velvety brownish black; the other parts of the membrane mottled with pale fuscous; apex of femora and of tibiæ and the tarsi infuscated; head with the apical processes starting from a common base, somewhat reflexed, not quite reaching the middle third of first antennal joint, separated by a very narrow subparallel interstice, with the internal margin straight and the external margin distinctly longitudinally convex; ocelli placed on the outer side of a raised, rounded tubercle, which is longitudinally sulcate in the middle; interocular space on the underside somewhat broader than the rostrum (♂); first joint of antennæ a little longer than the distance between the interocular furrow and the apex of the antenniferous tubercle; glabrous; second joint twice as long as first, longly erectly pilose; third and fourth joints short, finely pilose; fourth longer than third; pronotum rectangular at apex, with two obtuse keels somewhat diverging backwardly in the hind lobe; lateral angles acute a little raised and distinctly prominent; scutellum horizontal at apex; hemelytra almost reaching the middle of the last dorsal segment (♂); abdomen (♂) with the last dorsal segment rounded, rather broadly and

deeply sinuate at apex; carinated on the under side from its base to the apex of the fifth segment; second male genital segment four times as long as first, sinuate at apex. Length, ♂ 11.5 mm.

Demerara (R. J. Crew).

Akin to *D. hirticornis* Champ., but it is larger; the frontal spines are not divergent; the first antennal joint is much shorter; the lateral angles of the pronotum are more acute and prominent, and the last dorsal segment of the male is differently shaped.

This is the insect referred to by Van Duzee in Trans. Amer. Ent. Soc., 1901, p. 350, as *Narvesus* sp.

N. B.—The allied Australian genus *Agylla* Stal must bear the later name *Thelocoris* Mayr, the first name being pre-occupied (Walker, Lepidoptera, 1854).

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## The Bees of Nebraska.—I.

FAMILY PANURGIDÆ.

Genus **PERDITA** F. Smith.

BY MYRON H. SWENK AND T. D. A. COCKERELL.

### 1. *Perdita albipennis* Cresson.

This species is present over the entire State, specimens from Sioux County, Bridgeport, Haigler, Springview, Carns, West Point, Lincoln and Nebraska City having been examined. It flies from June 23 to September 14, visiting abundantly the flowers of *Helianthus annuus* and allied species, but is to be found on *Solidago*, *Grindelia* and *Rudbeckia* also.

### 2. *Perdita lacteipennis* n. sp.

♀.—Length, 9-10 mm.—Head and thorax blue-green, the former element predominating on head and metathorax, the latter on mesothorax, which has also an æneous tinge. Ends of mandibles, a narrow cuneate mark in the middle of the otherwise unmarked, shiny and sparsely punctured clypeus, a quadrate mark on each side of the face between the clypeus and the eye, a line on scape in front, a line on prothorax, a very large spot on tubercles, all of the knees and a broad stripe down the front of anterior tibiæ, yellow. Flagellum reddish testaceous beneath. Wings milky white, nervures and stigma pallid. Tegulæ pale. Abdomen black, the first segment with a large spot on each side, segments 2-5 crossed by very broad yellow bands, the first two sub-basal, oblique, and strongly notched on the posterior margin (sometimes completely narrowly interrupted), the last two submedian, trans-